

Chapter 5

Enforcement Progress

EPA uses the enforcement provisions of CERCLA, as amended by SARA, to maximize the involvement of potentially responsible parties (PRPs) in the clean-up process. The Agency's enforcement goals are to

- Continue to maintain high levels of PRP participation in conducting and financing cleanups through EPA's aggressive use of statutory authority;
- Ensure fairness and equity in the enforcement process; and
- Recover Superfund monies expended by EPA for response actions.

FY93 accomplishments illustrate the continuing success of EPA's Superfund enforcement efforts. EPA achieved enforcement agreements worth more than \$910 million in PRP response work. PRPs financed approximately 65 percent of the remedial designs (RDs) and 80 percent of remedial actions (RAs) started during the fiscal year. The Agency also collected more than \$24.4 million in CERCLA penalties. Through its cost recovery efforts, EPA achieved more than \$220 million in cost recovery settlements and collected more than \$185 million for reimbursement of Superfund expenditures.

The administrative improvements initiative announced during the year reinforces the Agency's goal to ensure fairness in the enforcement process by reducing transaction costs, accelerating the pace of cleanups, increasing public involvement, and enhancing the role of the states in Superfund. Continuing preparations for full implementation of the Superfund Accelerated Clean-Up Model (SACM), the Agency worked on developing a phased approach to enforcement at Superfund sites.

5.1 THE ENFORCEMENT PROCESS

The Superfund program integrates enforcement and response activities. To initiate the enforcement process, EPA identifies PRPs, notifies them of potential liability by issuing special notice letters, and seeks to negotiate an agreement with them to perform or pay for the cleanup. If agreement is reached, the Agency oversees the work performed under the legal settlement. If the PRPs do not settle, EPA may issue a unilateral administrative order (UAO) compelling them to perform the cleanup, or EPA may conduct the cleanup using Superfund monies and later pursue a cost recovery action against the PRPs for costs incurred. These steps are fundamental in obtaining PRP involvement in response activities and in recovering expended Trust Fund monies. The enforcement process is explained in more detail below.

- When a site is proposed for listing on the National Priorities List (NPL), or when a removal action is required, EPA conducts a PRP search to identify parties that may be liable for site cleanup and to collect evidence of their liability. PRPs include present and past owners or operators of the site, generators of waste disposed of at the site, and transporters who selected the site for disposal of hazardous waste.
- EPA notifies parties of their potential liability for future response work and for any past response costs incurred by the government, thus beginning the negotiation process.
- EPA encourages PRPs to undertake clean-up activities, specifically to start removal actions,

Acronyms Referenced in Chapter 5	
ACL	Alternate Concentration Limit
ADR	Alternative Dispute Resolution
AOC	Administrative Order on Consent
CD	Consent Decree
DOJ	Department of Justice
NPL	National Priorities List
PCP	Pentachlorophenol
PCBs	Polychlorinated Biphenyls
PAHs	Polycyclic Aromatic Hydrocarbons
PRP	Potentially Responsible Party
RA	Remedial Action
RD	Remedial Design
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
SACM	Superfund Accelerated Clean-Up Model
SVOC	Semi-Volatile Organic Compound
UAO	Unilateral Administrative Order
VOC	Volatile Organic Compound

remedial investigation/feasibility studies (RI/FSs), remedial designs (RDs), or remedial actions (RAs). If a PRP is willing to do the response work and capable of doing it, the Agency will attempt to negotiate an agreement allowing the PRP to conduct and finance the proposed clean-up work and to pay for past government costs. For RAs, the settlement must be in the form of a judicial consent decree (CD). The CD will be lodged with the court by DOJ. For other types of response actions, the agreement may be in the form of a CD or in the form of an administrative order on consent (AOC) issued by the EPA Regional Administrator. Both agreements are enforceable in a court of law. Under either agreement, if a PRP conducts the response work, EPA oversees the PRP's activities. PRPs who settle may seek contribution toward the cleanup from non-settling PRPs by bringing suit against them.

- EPA may also use a cash-out settlement to reach an agreement with PRPs. A cash-out settlement is a type of mixed funding settlement that requires PRPs to provide substantial up-front financing toward the cost of the site clean up that will be conducted by EPA. Cashout settlements may also include a premium to partially offset EPA's risk due to uncertainties, such as remedy failure or cost overruns.

- If settlement is not reached, CERCLA Section 106 provides EPA with the authority to issue a UAO requiring the PRPs to conduct the cleanup; EPA may also bring suit through DOJ to compel PRPs to perform the work. If the Agency issues a UAO and the PRPs do not comply, the Agency again has the option of filing a lawsuit to compel the performance specified in the order or to perform the work itself and then seek cost recovery and treble damages. A PRP may also agree to comply with the order and conduct the cleanup under the auspices of the order.
- If the site is cleaned up using Superfund monies, EPA will file suit through DOJ, when practicable, to recover the monies spent. Many of these suits to recover past costs will also include EPA claims for estimated future costs. Any money recovered from the PRPs is returned to the Trust Fund.

5.2 FISCAL YEAR 1993 PROGRESS

FY93 progress reflects the continuing success of Superfund enforcement efforts in securing PRP participation in undertaking Superfund cleanups and in recovering Trust Fund monies expended by EPA in its response efforts.

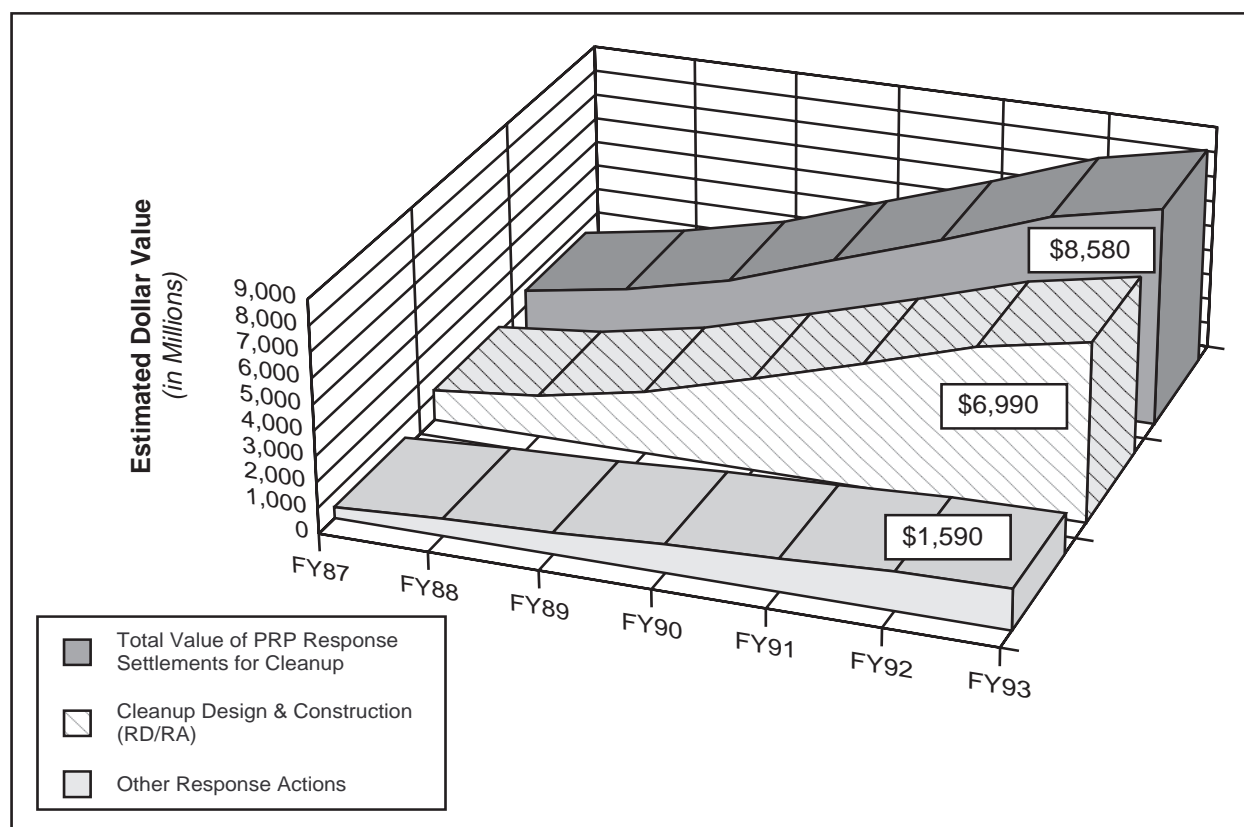
5.2.1 Settlements for Response Activities

During FY93, the Agency reached 189 settlements (CDs, AOCs, or UAOs in compliance) with PRPs for response activities worth more than \$910 million.* As shown in Exhibit 5.2-1, the cumulative value of PRP response settlements achieved under the Superfund program exceeds \$8.5 billion.

Of the 189 response settlements achieved in FY93, 86 settlements worth more than \$810 million were for remedial design/remedial actions (RD/RAs).

*Although UAOs legally are not settlements, they are included in this category if the PRP agrees to comply with the order and perform the required work under the order..

Exhibit 5.2-1
Cumulative Value of Response Settlements Reached
with Potentially Responsible Parties



Source: CERCLIS.

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These RD/RA settlements included CDs valued at nearly \$370 million, AOCs for more than \$20 million, and UAOs in compliance for more than \$420 million. These RD/RA settlements are a result of 96 RD/RA negotiations started and 80 completed by EPA during the fiscal year. During FY93, the Agency issued 127 UAOs and entered 108 AOCs, including agreements for removal actions, RI/FSs, RDs, and RD/RAs.

5.2.2 PRP Participation in Clean-Up Activities

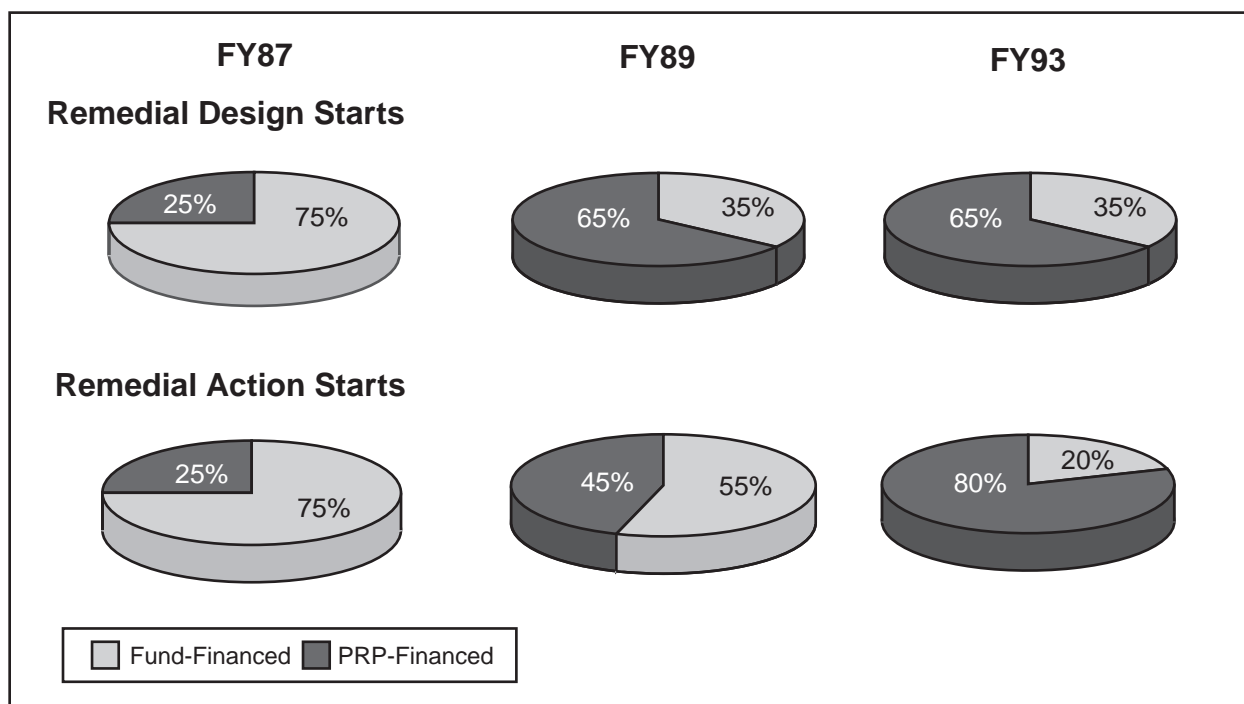
Exhibit 5.2-2 illustrates the continued high level of PRP participation in undertaking and financing RDs and RAs since the enactment of SARA in 1986

and the introduction of the “Enforcement First” initiative in 1990. In FY93, PRPs financed 65 percent of new RDs, approximately 80 percent new of RAs, and 40 percent of new RI/FSs.

5.2.3 Civil Judicial Penalties and Treble Damages

During FY93, EPA and DOJ achieved nearly \$24.4 million in CERCLA judicial and administrative penalties. This amount includes approximately \$23.9 million in final judgements on cases involving civil judicial penalties under CERCLA Sections 104(e)(5) and 106(b) and treble damages under CERCLA Section 107 (c)(3). Exhibit 5.2-3 lists the CERCLA

Exhibit 5.2-2
Increase in the Percentage of Remedial Designs and Remedial Actions Started
by PRPs Since the Enactment of SARA



Source: CERCLIS.

51-037-7B

civil judicial penalties and treble damage cases awarded to the Agency during the fiscal year. The \$24.4 million also includes more than \$453,000 achieved in 41 administrative penalty cases.

5.2.4 Cost Recovery Progress

Through improvements in its efforts to recover Trust Fund monies expended for Superfund cleanups, the Agency obtained record amounts in cost recovery settlements and collections. EPA and DOJ reached 204 settlements worth more than \$220 million. The \$220 million in FY93 cost recovery settlements represented 18 percent of the \$1.2 billion in cost recovery settlements achieved since the inception of Superfund. The Agency collected more than \$185 million on cost recovery settlements during FY93, representing 25 percent of the total \$730 million collected. Exhibit 5.2-4 illustrates Agency progress in reaching cost recovery settlements and in collecting monies on these settlements.

5.2.5 Success in Reaching and Enforcing Agreements with PRPs

During FY93, the EPA Offices of Regional Counsel and Regional Waste Management Divisions, working in conjunction with the Office of Waste Programs Enforcement, Office of Enforcement, and DOJ, entered into numerous enforcement agreements with PRPs, establishing several major enforcement precedents. Exhibit 5.2-5 highlights examples of significant settlements reached during the fiscal year.

5.3 ENFORCEMENT INITIATIVES

As part of the administrative improvements initiative, the Agency engaged in new and continued efforts to promote equity in the enforcement process. Fiscal year efforts included activities aimed at fostering greater fairness for Superfund site property

Exhibit 5.2-3
Fiscal Year 1993 CERCLA Civil Judicial Penalties and Treble Damages

Region	Defendant(s)	Amount of Penalty	CERCLA Provision
6	Roger L. Tannery	\$12,475,000	§104(e)(5)(B)
5	Aqua-Tech, Inc.; I.Jones Partnership; Frederick J. Cook, Jr.; Thomas J. Hanchar (jointly & severally liable)	9,663,885	§107(c)(3)
1	Ethan Allen, Inc.	746,292	§106(b)
2	Randolph Products Co.	300,000	§106(b)
10	Bunker Ltd. Partnership	202,000	§104(e)(5)(B)
1	Interex (now known as Clean Harbors of Natick, Inc.)	172,800	§106(b)
2	Matlack, Inc.	125,000	§106(b)
5	Peterson Sand & Gravel	100,000 ¹	§104(e)(5)(B)
2	W.R. Case & Sons	50,000	§106(b)
2	Genzale Plating Co.	40,000	§104(e)(5)(B)
5	Hyman & Manuel Cohen	20,000	§104(e)(5)(B)
2	Delaware Container	10,000	§106(b)
2	Madison Disposal	4,075	§104 (e)(5)(B)
	Total	\$23,899,052	
	Total FY93 Administrative Penalties	453,272	
	Total FY93 CERCLA Penalties (Judicial and Administrative)	\$24,352,324	

¹An additional \$10,000 Clean Water Act penalty was also obtained in this case.

Source: Office of Site Remediation and Enforcement.

51-037-39

owners, encouraging early settlements with *de minimis* and “de micromis” parties, increasing the use of alternative dispute resolution (ADR), and evaluating the increased use of mixed funding. The Agency also continued preparations for streamlining the enforcement process to correspond to the accelerated clean-up activities that will occur under full implementation of SACM.

5.3.1 Greater Fairness for Owners at Superfund Sites

In an effort to clarify the potential liability of Superfund site property owners, EPA addressed several issues, including the filing of federal liens on Superfund site properties, and the involvement of

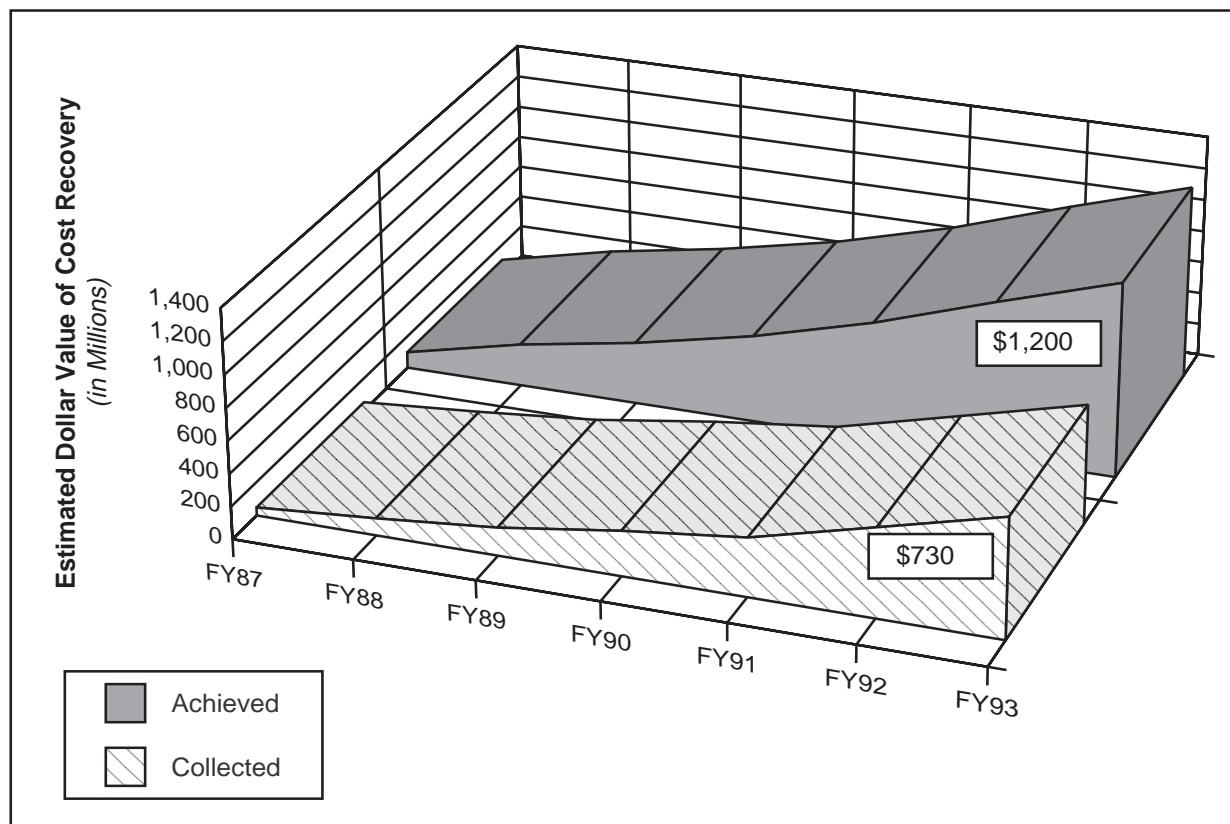
prospective purchasers of Superfund site property in site cleanups.

Federal Superfund Liens

On July 29, 1993, EPA issued *Supplemental Guidance on Federal Superfund Liens* (OSWER Directive No. 9832.12-1a). The guidance establishes procedures for the Regions to follow to provide owners of Superfund properties with adequate notice of any federal lien to be filed against their property and an opportunity to comment on the filing of the lien.

The guidance states that the Regions will notify property owners of the Agency’s intention to file and perfect a notice of lien. The notification letter states the basis for the lien and offers the property owner an

Exhibit 5.2-4
Cumulative Value of
Cost Recovery Dollars Achieved and Collected



Source: CERCLIS.

51-037-6

opportunity to comment on the filing of the lien. To comment, a property owner may submit written documentation to EPA or attend an informal meeting facilitated by a neutral party.

Prospective Purchaser Guidance

Prospective purchasers of contaminated property at some NPL sites are willing to conduct or finance some clean-up work in return for a covenant from EPA not to sue. Current policy limits the use of the covenants. EPA is considering options that would allow greater latitude in negotiating with prospective purchasers to facilitate the re-use or development of contaminated or formerly contaminated property. EPA will seek to issue supplemental prospective purchaser guidance, prepare a model prospective

purchaser agreement, and consider criteria for and application of other mechanisms to remove barriers to property development.

5.3.2 Streamlined Approach for *De Minimis* Settlements

Under CERCLA Section 122(g), EPA has the authority to enter into settlements with PRPs whose contribution of hazardous waste at a site is minimal in terms of volume and toxicity, compared to the total hazardous waste at a site. EPA promotes the use of these *de minimis* settlements to resolve the liability of small waste contributors equitably, reduce transaction costs for both private parties and the government, and improve the efficiency of case management.

Exhibit 5.2-5
Highlights of Successful Enforcement Accomplishments

Settlement	Terms of the Settlement
<p>Charles George Landfill Massachusetts (Region 1)</p> <p>Settlement: Two CDs (CD01 and CD02) for cost recovery and future costs—one entered in the District Court on 05/24/93 and one lodged with the District Court on 07/27/93</p> <p>Estimated Value: \$38.6 million</p>	<p>Under the 05/24/93 CD, 54 PRPs, including 12 municipalities, will pay \$35.5 million for past and future response costs incurred in addressing volatile organic compounds (VOCs), arsenic, and ammonia contamination of ground water at the site.</p> <p>Under the 11/12/93 CD, operators, James George and Charles George, with a transporter, C&J Trucking Company, Inc., will reimburse EPA \$3.1 million for past and future response costs.</p>
<p>Caldwell Trucking Company New Jersey (Region 2)</p> <p>Settlement: One UAO (UAO01) for RA issued on 04/19/93 and one UAO (UAO02) for RD issued on 06/29/93</p> <p>Estimated Value: \$26 million</p>	<p>In compliance with the UAO issued on 04/19/93, 11 PRPs will excavate and dispose of soil and sludge that are contaminated with VOCs and heavy metals, including lead, mercury, and arsenic at an estimated cost of \$25 million.</p> <p>In compliance with the UAO issued on 06/29/93, 15 PRPs will conduct studies, valued at \$1 million, to determine the extent of ground-water contamination at the site.</p>
<p>Preferred Plating Corporation New York (Region 2)</p> <p>Settlement: UAO (UAO01) for RA issued on 06/14/93</p> <p>Estimated Value: \$1.4 million</p>	<p>In compliance with the UAO, PRPs will undertake clean-up efforts, valued at \$1.4 million, to excavate and remove soil contaminated with VOCs and heavy metals. EPA will then install an on-site system to treat contaminated ground water.</p>
<p>Endicott Village Well Field Site New York (Region 2)</p> <p>Settlement: CD (CD01) for RD/RA and <i>de minimis</i> settlement referred to DOJ on 09/22/93</p> <p>Estimated Value: \$17.1 million</p>	<p>Four PRPs will conduct work estimated at \$16.9 million to cap the landfill and treat leachate seeps to prevent spread of VOC and metal contamination.</p> <p>The four PRPs will pay EPA's future oversight costs.</p> <p>Two <i>de minimis</i> parties will pay \$200,000 in past response costs.</p>
<p>Eastern Diversified Metals Pennsylvania (Region 3)</p> <p>Settlement: UAO (UAO03) for RA issued on 06/25/93</p> <p>Estimated Value: \$13.1 million</p>	<p>In compliance with UAO, AT&T Nassau Metals Corporation and Theodore Sall, Inc., will conduct clean-up work valued at \$13.1 million. To address heavy metal contamination of site soil, the PRPs will recycle waste insulation at the site, treat and dispose of recycling residuals, investigate soil contamination in the waste insulation disposal area to determine the extent of soil contamination, and implement erosion control measures.</p> <p>The settlement is significant as it is the first under Superfund to require a recycling remedy.</p>

Exhibit 5.2-5
Highlights of Successful Enforcement Accomplishments (cont.)

Settlement	Terms of the Settlement
<p>Fike/Artel West Virginia (Region 3)</p> <p>Settlement: UAO (UAO03) for RA issued on 06/30/93</p> <p>Estimated Value: \$16 million</p>	<p>In compliance with the UAO, 21 PRPs will excavate, treat, and dispose of approximately 7,000 to 16,000 buried drums from chemical manufacturing operations at the site. The estimated cost of the activities is \$16 million. On-site soil, ground water, and surface water have been contaminated with VOCs, polychlorinated biphenyls (PCBs), dioxin, cyanide, asbestos, metals, and methylmercaptan.</p>
<p>MW Manufacturing Pennsylvania (Region 3)</p> <p>Settlement: UAO (UAO02) for RA issued on 03/31/93</p> <p>Estimated Value: \$37.4 million</p>	<p>AT&T Nassau Metals Corporation, Pennsylvania Power & Light Company, and Warehouse 81 Limited Partnership, in compliance with the UAO, will undertake \$37.4 million in clean-up work to address VOC, lead, copper, and zinc ground-water contamination. The PRPs will install a waterline to connect nearby residences with the public water supply system and will treat contaminated ground water using air stripping and chemical precipitation technologies.</p>
<p>Lackawanna Refuse Pennsylvania (Region 3)</p> <p>Settlement: CD (CD02) for a <i>de minimis</i> settlement entered with District Court on 11/23/92</p> <p>Estimated Value: \$1.5 million</p>	<p>Fourteen <i>de minimis</i> PRPs, each of whom contributed 1.3 percent or less of the total volume of waste received at the landfill, will reimburse EPA \$1.5 million for past and future response costs.</p> <p>Hazardous wastes disposed of in the municipal landfill contaminated soil and surface water at the site. To address the contamination, EPA removed and disposed of 8,000 drums from the site, and placed a clay cap over the contaminated area.</p>
<p>Lindane Dump Pennsylvania (Region 3)</p> <p>Settlement: CD (CD01) for RD/RA and cost recovery entered in District Court on 06/28/93</p> <p>Estimated Value: \$14.1 million</p>	<p>Elf Atochem North America, Inc., will pay \$14.1 million for future response costs, EPA's past costs, and pre-judgement interest. To address pesticide contamination at the site, Atochem will treat ground water and cover the landfill.</p> <p>This landmark judicial settlement included non-binding mediation for dispute resolution over additional work required at the site.</p>
<p>Tonolli Corporation Pennsylvania (Region 3)</p> <p>Settlement: CD (CD01) for RD/RA referred to DOJ on 09/30/93.</p> <p>Estimated Value: \$16.6 million</p>	<p>Forty-five PRPs will conduct work valued at \$16.6 million. To address lead, arsenic, cadmium, and chromium contamination at the site, the PRPs will close and cap the landfill, excavate and stabilize contaminated soil, and take measures to prevent migration of the contaminated ground water.</p>

Exhibit 5.2-5
Highlights of Successful Enforcement Accomplishments (cont.)

Settlement	Terms of the Settlement
<p>Aberdeen Pesticide Dumps North Carolina (Region 4)</p> <p>Settlement: 41 UAOs (UAO03 – 05, 07– 08) for RA issued on 05/20/93</p> <p>Estimated Value: \$32 million</p>	<p>Forty-one UAOs were issued to 22 PRPs. In compliance with the UAOs, the PRPs will cleanup pesticide-contaminated soils at five different areas of the site. The estimated cost is \$32 million, depending on whether thermal desorption or incineration is used to treat contaminated soil.</p>
<p>Koppers Company, Inc./Beazers, Inc. North Carolina (Region 4)</p> <p>Settlement: UAO (UAO01) for RA issued on 04/21/93</p> <p>Estimated Value: \$11 million</p>	<p>Koppers Company, Inc./Beazer-East, Inc., in compliance with the UAO, will perform and fund cleanup valued at \$11 million to address soil, ground water, and surface water contaminated with pentachlorophenol (PCP), polychlorinated furans, and dioxins from former wood treatment operations at the site.</p>
<p>Mathis Bros. Landfill Georgia (Region 4)</p> <p>Settlement: UAO (UAO01) for RA issued on 08/19/93</p> <p>Estimated Value: \$12.9 million</p>	<p>In compliance with the UAO, three PRPs will fund and perform clean up of contamination resulting from the disposal at the landfill of herbicide production residues and latex wastes. To clean up contaminated soil, the PRPs will excavate contaminated waste and soil, incinerate and dispose of excavated material, undertake studies to determine whether bioremediation would be a viable treatment option for contaminated subsurface soil, and construct a clay cap over the treated area. Contaminated ground water will be collected and treated off site.</p>
<p>Berlin & Farro Michigan (Region 5)</p> <p>Settlement: UAO (UAO02) for RA issued on 09/24/92, with notice of PRPs' intent to comply received on 11/23/92. EPA also continued negotiations with <i>de minimis</i> PRPs.</p> <p>Estimated Value: \$10 million</p>	<p>In compliance with the UAO, 15 PRPs will remove liquid contaminants from the site at an estimated cost of \$10 million.</p> <p>EPA is also negotiating with 95 <i>de minimis</i> parties for a settlement worth \$2.5 million for reimbursement of past response costs and future oversight costs at the site.</p> <p>EPA's past clean-up work at the site included excavating and disposing of soil contaminated with VOCs and PCBs, constructing a fence around the site, and upgrading an underflow dam to prevent migration of contamination from the site.</p>
<p>City Disposal Corp. Landfill Wisconsin (Region 5)</p> <p>Settlement: UAO (UAO01) for RD/RA issued on 03/23/93</p> <p>Estimated Value: \$14 million</p>	<p>To remove VOC contamination from soil and ground water and to prevent migration of contaminants into local wildlife habitats, waterways, and residential and agricultural areas, Waste Management, Inc., will comply with the UAO and undertake clean-up actions valued at \$14 million. Work will include conducting studies of the extent of ground-water contamination, including sampling of residential wells; pumping and treating contaminated ground water; capping the landfill; and collecting and disposing of subterranean gases.</p>

Exhibit 5.2-5 Highlights of Successful Enforcement Accomplishments (cont.)

Settlement	Terms of the Settlement
<p>Muskego Sanitary Landfill Wisconsin (Region 5)</p> <p>Settlement: UAO (UAO02) for RA issued on 12/09/92</p> <p>Estimated Value: \$9.9 million</p>	<p>Forty-one of 46 parties that were issued the UAO have agreed to comply with the order to conduct \$9.9 million in response work to prevent the spread of contamination at the site. Under the order, the parties will control contaminant migration and clean up and monitor on-site ground water, which is contaminated with VOCs and heavy metals, including lead and chromium.</p>
<p>Lemberger Landfill, Inc./Transport and Recycling Sites Wisconsin (Region 5)</p> <p>Settlement: CD (CD01) for RD/RA and cost recovery entered in District Court on 10/20/92, and an AOC (AOC01) issued on 07/15/93</p> <p>Estimated Value: \$27 million</p>	<p>Under the CD, 11 PRPs, including one municipality, will pay \$20 million for clean-up and for past and future EPA costs. To address PCP, pesticide, arsenic, chromium, lead, and VOC contamination, the parties will regrade the existing landfill cap at the Lemberger Landfill site, and contain, treat, and monitor ground water at both the landfill and the Transport and Recycling sites.</p> <p>Under the AOC, parties will conduct work at the Transport and Recycling site valued at \$7 million, including excavating and disposing of drums, treating contaminated soil using vapor extraction, and capping the landfill.</p>
<p>Reilly Tar & Chemical Corporation Indiana (Region 5)</p> <p>Settlement: CD (CD01) for RD/RA and cost recovery lodged with District Court on 08/10/93</p> <p>Estimated Value: \$18 million</p>	<p>Under the CD, Reilly Industries, Inc., will undertake clean-up efforts at operable unit 1 valued at \$18 million, and will reimburse EPA \$256,000 for past costs. Reilly will install extraction wells to prevent off-site migration of benzene, pyridine, ammonia, and polycyclic aromatic hydrocarbons (PAHs).</p> <p>EPA signed a record of decision (ROD) for operable unit 2 on September 30, 1993, for the cleanup of contaminated soil at the site and continued in RD/RA negotiations with Reilly Industries, Inc. The ROD requires excavating soil or sludge at five former disposal areas, treating it by low temperature thermal desorption or <i>in situ</i> solidification, and covering the areas with soil or a semi-permeable cap. The value of this remedy is estimated to be \$6 million.</p>
<p>Butterworth Landfill No. 2 Michigan (Region 5)</p> <p>Settlement: AOC (AOC02) for RD issued on 02/23/93</p> <p>Estimated Value: \$1 million</p>	<p>To investigate and design remediation work for heavy metal, VOC, semi-volatile organic compound (SVOC), and PCB contamination at the site, six PRPs will conduct work valued at \$1 million to design a clay cap, determine locations for monitoring wells, assess the landfill's ecological impact, plan for the removal of buried drums, and establish Alternate Concentration Limits (ACLs) for the ground water.</p> <p>EPA expects to reach agreement with the parties to undertake the RA, valued at \$12.5 million.</p>

Exhibit 5.2-5
Highlights of Successful Enforcement Accomplishments (cont.)

Settlement	Terms of the Settlement
<p>M.T. Richards, Inc. Illinois (Region 5)</p> <p>Settlement: AOC (AOC01) for <i>de minimis</i> settlement issued on 04/02/93</p> <p>Estimated Value: \$288,000</p>	<p>Under the AOC, 72 <i>de minimis</i> parties will pay \$288,000 toward past costs incurred at the site. This payment includes a 100 percent premium to cover cost overruns and any outstanding costs from non-settlers and parties not eligible to take part in the <i>de minimis</i> settlement.</p> <p>EPA performed a removal action at the site to eliminate the threat posed by deteriorating on-site tanks. The tanks were leaking PCB, lead, toxic, and organic-contaminated oil wastes into the site soil and a nearby creek. As of the end of FY92, EPA had incurred response costs in excess of \$1.6 million.</p>
<p>Organic Chemicals Michigan (Region 5)</p> <p>Settlement: AOC (AOC01) for <i>de minimis</i> settlement issued 11/17/92</p> <p>Estimated Value: \$1.3 million</p>	<p>Under this settlement, 100 <i>de minimis</i> parties will reimburse EPA and major waste contributors approximately \$1.3 million for past and future response costs. This payment covers orphan shares and includes a 60 percent premium for cost overruns or other unforeseen expenses incurred during implementation of the remedy.</p> <p>As a result of solvent recovery and chemical manufacturing at the site, chlorinated solvents and a mixture of benzene, ethylene, toluene, and xylene (BETX) have contaminated soil and ground water.</p>
<p>Koppers Company, Inc./Beazers, Inc. Texas (Region 6)</p> <p>Settlement: UAO (UAO01) for RA issued on 03/02/93</p> <p>Estimated Value: \$15 million</p>	<p>To address PCP, arsenic, zinc, and creosote contamination resulting from wood treatment operations at the site, Koppers Company, Inc./Beazers, Inc., will comply with the UAO and will demolish houses on the site, remove contaminated debris, excavate and treat contaminated soil, and conduct long-term ground-water treatment.</p>
<p>Prewitt Abandoned Refinery New Mexico (Region 6)</p> <p>Settlement: UAO (UAO02) for RD/RA issued on 03/14/93</p> <p>Estimated Value: \$16 million</p>	<p>In compliance with the UAO, Atlantic Richfield Company and El Paso Natural Gas Company will conduct \$16 million in clean-up work to address lead and VOC contaminated soil and ground water at the site. The PRPs will pump and treat the contaminated ground water at the site and clean up contaminated soil using a combination of bioremediation, soil-vapor extraction, excavation, and off-site disposal.</p> <p>The Navajo Nation, who owned the site from 1966 to September 1992 and still owns nearby lands, has worked successfully with EPA in overseeing initiation of the cleanup of the site. The New Mexico Environment Department has also cooperated in the remediation efforts.</p>

Exhibit 5.2-5 Highlights of Successful Enforcement Accomplishments (cont.)

Settlement	Terms of the Settlement
<p>Iron Mountain Mine California (Region 9)</p> <p>Settlement: UAO (UAO04) for RD/RA issued on 11/03/92</p> <p>Estimated Value: \$20 million</p>	<p>In compliance with the UAO, three PRPs will design and construct an acid mine drainage treatment plant at the site, at an estimated cost of \$20 million. Heavy metals, such as copper, cadmium, and zinc, are leaching from the site contaminating run-off water which flows to a nearby reservoir. Water from the reservoir is periodically released to the Sacramento River which supplies drinking water to more than 75,000 people in the City of Redding.</p>
<p>Commencement Bay Nearshore/Tideflats Washington (Region 10)</p> <p>Settlement: CD (CD08) for RD/RA lodged on 08/19/93</p> <p>Estimated Value: \$37 million</p>	<p>The Port of Tacoma will undertake clean-up work valued at \$25 million to dredge and remediate sediments contaminated with arsenic, cadmium, lead, zinc, copper, nickel, and PAHs from two inlets of the Bay. The dredged and remediated materials will be used to fill the Milwaukee Waterway, adding 24 acres to the Port's shipping terminal.</p> <p>Also, the Port will pay an additional \$12 million to restore area fisheries and wildlife habitats, replacing the habitat lost in filling the Milwaukee Waterway. The National Oceanic and Atmospheric Administration, the Department of the Interior, the State of Washington, the Puyallup Tribe, and the Muckleshoot Tribe will oversee the Port's restoration efforts.</p>
<p>Gould, Inc. Oregon (Region 10)</p> <p>Settlement: CD (CD02) for <i>de minimis</i> settlement entered in District Court on 02/04/93</p> <p>Estimated Value: \$980,000</p>	<p>Six <i>de minimis</i> parties, each of whom contributed 1.5 percent or less of the total hazardous waste at the site, will reimburse EPA \$980,000 for past costs and a portion of oversight costs at the site. This payment includes a premium of almost \$280,000 for future costs.</p> <p>PRPs who contributed major portions of waste to the site are performing clean-up work to address lead and lead-oxide contamination resulting from secondary lead smelting and battery recycling operations. Contamination affects site soil, ground water, and surface water, as well as sediments in a nearby lake.</p>

51-037-30,6B

On July 30, 1993, EPA issued guidance entitled, *Streamlined Approach for Settlements with de minimis Waste Contributors under CERCLA Section 122(g)(1)(A)*. This document supplements and, in some instances, supersedes existing guidance for *de minimis* settlements. The guidance

- Sets forth the minimum level of information a Region should have before considering a *de minimis* settlement. The new guidance suggests that the Regions do not have to prepare waste-in lists identifying specific amounts and types of waste contributed by each PRP at the site before

determining a party's eligibility for *de minimis* settlement. Instead, the policy suggests that the Regions need only assess the individual's waste contribution relative to the overall volume of waste at the site.

- Recommends that Regions streamline the process of calculating PRP payments. The guidance identifies factors that the Regions should consider when establishing baseline payments (a baseline payment is the value of payment before any premiums are assigned) and premiums. In cases where the costs are difficult to estimate, the guidance describes a payment matrix that can be used to approximate a range of costs.
- Encourages the Regions to become more active in facilitating *de minimis* settlements. Accordingly, Regions should offer individual *de minimis* settlements without waiting for the *de minimis* group to form; provide assistance in forming the *de minimis* group where there is potential for a *de minimis* settlement; and develop a communication strategy that provides information to both *de minimis* and non-*de minimis* parties on the terms and benefits of a *de minimis* settlement.

5.3.3 Guidance on "De Micromis" Settlements

In addition to guidance on *de minimis* settlements, EPA worked to develop guidance on "de micromis" settlements, for those PRPs whose waste contribution is minuscule in terms of volume and toxicity. (The amount of contribution by a "de micromis" party is smaller than that of a *de minimis* party.) Without a settlement agreement with the Agency, "de micromis" PRPs are vulnerable to third-party contribution suits by major waste contributors.

On July 30, 1993, EPA issued *Guidance on CERCLA Settlements with "De Micromis" Waste Contributors* to facilitate the implementation of "de micromis" settlements. The guidance recommends that Regions follow certain procedures including examining relevant information before offering a

"de micromis" settlement; determining the volumetric cutoff for "de micromis" eligibility; determining when to enter a "de micromis" settlement and whether to pursue an administrative or a judicial settlement with "de micromis" parties; and calculating the appropriate payment amount for a "de micromis" party.

5.3.4 Increased Use of Alternative Dispute Resolution

ADR is a valuable tool for ensuring fairness and reducing transaction costs. ADR involves the use of a neutral third party who helps PRPs organize for negotiations, facilitates settlement deliberations, and/or provides opinions to the negotiating parties. During FY93, the Agency increased its case use of ADR, developed ADR case support systems and training services, and conducted outreach to the regulated community on the benefits of ADR. Progress in the use of ADR during the year included

- Use of ADR mechanisms (primarily mediation and convening services) in 18 enforcement actions;
- Initiation of an expansive program in Region 1 involving Regional training and the use of ADR in cost recovery and RD/RA negotiations;
- Use of ADR for the first time to facilitate a settlement for a removal action and to assist in negotiations involving federal facilities;
- Initiation of a pilot program assessing the use of arbitration to resolve cost recovery cases;
- Start of two major initiatives to provide ADR support for PRP cost allocation efforts, including identification of 20 sites where support will be provided;
- Organization of a national network of ADR contacts and ADR-experienced staff to provide advice; and
- Initiation of presentations and training programs on effective ADR use for EPA Regional and Headquarters staff, PRPs, professional organizations, and other federal agencies.

5.3.5 Mixed Funding Evaluation

Under CERCLA Section 122(b), EPA has the authority to enter into “mixed funding” settlements in which both Trust Fund and PRP resources are used to clean up sites. There are three types of mixed funding settlements: “preauthorized,” in which the PRPs perform the response action and a portion of the financing is provided by EPA; “cashout,” in which the Agency performs the response action and the PRPs pay a portion of the response costs; and “mixed work,” in which EPA and the PRPs perform separate portions of the response action. In FY93, as part of the Superfund administrative improvements initiative, the Agency began a two-part evaluation of its mixed funding policy to address concerns expressed by PRPs.

In the first part of the evaluation, which was completed in FY93, the Agency analyzed the potential cost to the Trust Fund if Fund-financing was routinely used to pay for the “orphan share” of clean-up costs at enforcement-lead sites (sites where PRPs perform the cleanup). The analysis estimated that (assuming orphan shares at every enforcement-lead site) the annual cost to the Trust Fund would be \$420 million. The \$420 million total includes \$270 million for funding portions of clean-up costs allocable to nonviable PRPs and \$150 million for waste shares that cannot be allocated to specific PRPs.

In the second part of the evaluation, the Agency will examine options for streamlining both the mixed funding decision-making process and the

documentation requirements associated with preauthorized mixed funding. EPA will also pilot several mixed funding settlements.

5.3.6 Enforcement under the Superfund Accelerated Clean-Up Model

EPA is modifying its approach to CERCLA enforcement to correspond to the changes in the clean-up program that will be brought about by the implementation of SACM. Preparing for full implementation of SACM, the Agency undertook efforts to streamline enforcement-related activities while maintaining high levels of PRP participation in response work as follows:

- Initiating a phased PRP search as soon as a decision is made that a site requires a response;
- Issuing general notice letters, when appropriate, prior to the start of the expanded site investigation/remedial investigation phase of the integrated site assessment;
- Providing constructive notice (i.e., notices in local newspapers and the *Federal Register*) to alert unidentified PRPs who might be interested in participating in site decisions;
- Ensuring that PRPs participate substantially in early actions; and
- Making greater use of AOCs with cooperative PRPs to initiate RDs.